

**COMPOSITION, FORMULATIONS & METHOD FOR PREVENTION &  
TREATMENT OF DISEASES AND CONDITIONS ASSOCIATED WITH  
BRONCHOCONSTRICITION, ALLERGY(IES) & INFLAMMATION**

**ABSTRACT OF THE DISCLOSURE**

A pharmaceutical composition effective for preventing and alleviating bronchoconstriction, allergy(ies) and/or inflammation comprises a surfactant and a nucleic acid comprising an oligonucleotide anti-sense to an adenosine A1, A2a, A2b or A3 receptor gene, mRNA, flanking regions or regions bridging the intro/exon borders, analogues which bind thymidine but have low adenosine content or exhibit lower or no adenosine receptor agonist activity, combinations thereof, physiologically acceptable salts thereof or mixtures thereof, and optionally a carrier and other agents such as therapeutic agents and formulation products known in the art. The composition is formulated for administration by a multiplicity of routes for the prevention or alleviation of diseases and conditions associated with breathing difficulties, impeded and obstructed airways, bronchoconstriction, allergy and/or inflammation. Among the applications of this technology are the prevention and treatment of diseases and conditions such as asthma, kidney damage or failure, ARDS, pulmonary vasoconstriction, inflammation, allergies, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as

leukemias, lymphomas, carcinomas, and the like, e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepatocellular carcinoma, kidney cancer, melanoma, hepatic, lung, breast, and prostate metastases, etc., to counter the renal damage and failure associated with ischemic conditions and the administration of certain drugs and radio active diagnostic and therapeutic agents, as well as a joint therapy with the administration of adenosine and adenosine-like agents in the treatment of arrhythmias such as SVT and in cardiovascular function tests (stress tests). The present agent(s) is (are) also suitable for administration before, during and after other treatments, including radiation, chemotherapy, antibody therapy, phototherapy and cancer, and other types of surgery. Alternatively, the present agent may be effectively administered preventatively, prophylactically or therapeutically, and in conjunction with other therapies, or by itself for conditions without known therapies or as a substitute for therapies that have significant negative side effects.

a:\epi-072.apl

03/06/2007 10:22:46 AM